

Date: Thursday, 3/8/2007 12:36:50 PM
 User: Kim Johnston

Process Sheet

SPLIT

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	DUAL MIRROR ASSEMBLY
Job Number :	31102 -1		
Estimate Number :	12278	Part Number :	D206558043
P.O. Number :	N/A	Drawing Number :	D206-558 PG4-6/D2066
This Issue :	3/8/2007 S.O. No. : N/A	Project Number :	N/A
Prsht Rev. :	NC	Drawing Revision :	C/B
First Issue :	N/A Type : MACHINED PARTS	Material :	N/A
Previous Run :	28814	Due Date :	3/30/2007 Qty: 5 Um: Each
Written By :	<u>JA 07.03.08</u>		
Checked & Approved By :	<u>JA 07.03.08</u>		
Comment :	Est. G02.09.19 Re-format; Incorporated D2066 KJ		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	DC	DOCUMENT CONTROL
-----	----	------------------



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-558-043 CHG005

MS 07-03-12 (5)

2.0	D2011101	Mirror 6"
-----	----------	-----------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)
 Mirror 6"

Pick:

Qty Part Number	Description	Batch
2 D2011-101	Mirror Ass'y 6"	B 29773

FF 07-03-21 5

3.0	D2052	Bracket
-----	-------	---------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)
 Bracket

Batch

B 17216

FF 07-03-14 5

4.0	D2054	Bushing - Delrin
-----	-------	------------------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)
 Bushing - Delrin

Batch

B 16711

FF 07-03-14 5

5.0	D2055	Clamp
-----	-------	-------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)
 Clamp

Batch

B 16712

FF 07-03-14 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 3/8/2007 12:36:50 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL MIRROR ASSEMBLY

Job Number: 31102

Part Number: D206558043

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

D2056

Bell Crank Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Bell Crank Assembly

Batch B26524

FF 07-03-14

5

7.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Washer

Pick:

Qty Part Number Description Batch

4 AN960JD10 Washer M103585

FF 07-03-21

5

8.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Nut

Pick:

Qty Part Number Description Batch

* 2 MS21042L3 Nut M102650
or MS21042-3

FF 07-03-21

5

9.0

MS27039118

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Screw

Pick:

Qty Part Number Description Batch

2 MS27039-1-18 Screw M12307

FF 07-03-21

5

10.0

M304TR0500W035

304 RD Tube .500 x .035W



Comment: Qty.: 2.8000 f(s)/Unit Total : 14.0002 f(s)

304 RD Tube .500 x .035W

304/316 SS Seamless Tube

(Ref. QSI 017 4.1.1.2) as per Dwg D2066 using punch Jig DT8012.

Identify as D2066.

Batch: M103453

Deburr and Polish

Note: Punch 1 end only at this time.

FF 07-03-14

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 3/8/2007 12:36:50 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL MIRROR ASSEMBLY

Job Number: 31102

Part Number: D206558043

Job Number:



Seq. #:

Machine Or Operation:

Description:

11.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Punch 1/2" OD x .035 " Wall

Slide on parts D2052, D2055, D2056, D2054 as per Dwg D206-558

Note orientation of belcrank and order of parts.

Punch other end to length (28.62") as per Dwg D2066

Use template DT8054

FF 07-03-15 5

12.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Flatten the ends on Hydraulic press using DT8545

Bend per Dwg D2066 using template D2066T1

Deburr

Drill 3/16" Dia holes per D2066T1 template and Dwg D2066

Deburr holes

Assemble remaining parts as per Dwg D206-558

FF 07-03-21 5

13.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/03/21 (5)

14.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

15.0

D2053

Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Bracket

Pick: Packing Kit

Qty Part Number Description Batch

1 D2053 Bracket

516710 ✓

16.0

D2067

Connector



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Connector

Pick: Packing Kit

~~D2053~~ 07/03/23 (5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 3/8/2007 12:36:50 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL MIRROR ASSEMBLY

Job Number: 31102

Part Number: D206558043

Job Number:



Seq. #: Machine Or Operation: Description :

Qty Part Number Description Batch
1 D2067 Connector

B20875 ✓

17.0

D2071

Cable Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Cable Assembly

Pick: Packing Kit

Qty Part Number Description Batch
1 D2071 Cable

B26525 ✓

MANQUEZ

18.0

AN34A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Bolt

Pick: Packing Kit

Qty Part Number Description Batch
4 AN3-4A Bolt

M103641 ✓

19.0

AN5261032R9

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Screw

Pick: Packing Kit

Qty Part Number Description Batch
4 AN526-1032R9 Screw
or AN526C1032R9

M101189 ✓

20.0

AN960JD10L

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 20.0000 Each(s)

Washer

Pick: Packing Kit

Qty Part Number Description Batch
4 AN960JD10L Washer

M101291 ✓

21.0

MS21919DG5

Clamp



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Clamp

Pick: Packing Kit

Qty Part Number Description Batch
2 MS21919DG5 Clamp
or MS21919WDG5

M117864 ✓

4/23/23 (5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/03/30

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 3/8/2007 12:36:50 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DUAL MIRROR ASSEMBLY

Job Number: 31102

Part Number: D206558043

Job Number:



Seq. #:

Machine Or Operation:

Description :

22.0

MS354899

Grommet



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Grommet

Pick: Packing Kit

Qty Part Number Description Batch

1 MS35489-9 Grommet

119619 ✓

07/03/23 (5) ✓

23.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

07/3/29 (5) Sx

24.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

REV B

07/3/29

(3)

Sx

25.0

QC21

FINAL INSPECTION/W/O RELEASE



(3)

Comment: FINAL INSPECTION/W/O RELEASE

07/03/30

Job Completion



07-03-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

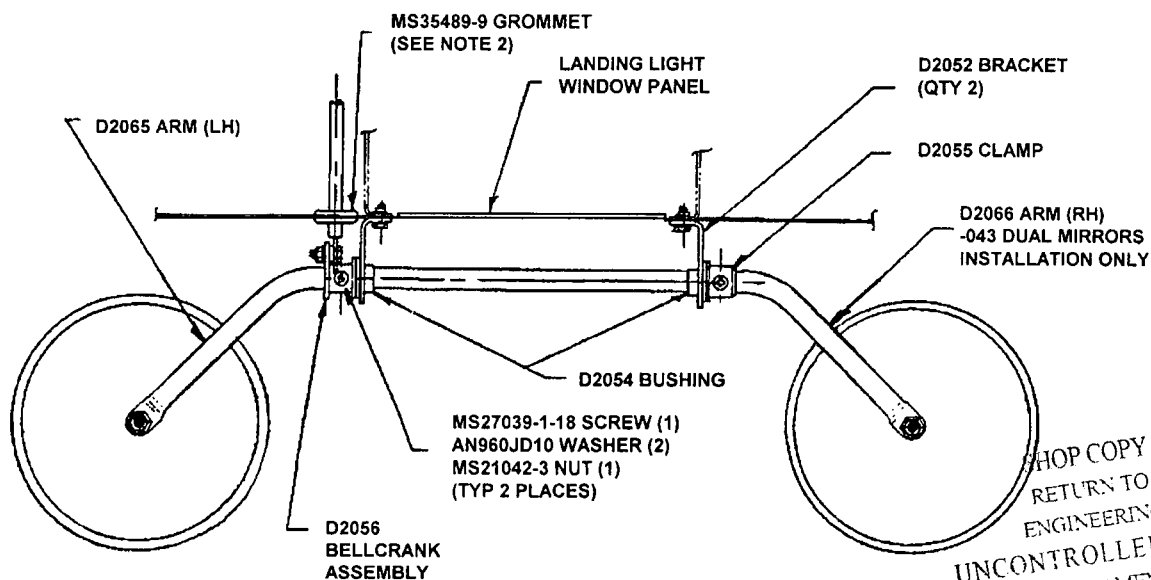
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

3.0 CARGO MIRROR INSTALLATION

Install the Cargo Mirror as follows:

1. Install D206-558-041/-043 cargo mirror assembly using AN3-4A bolts and AN960JD10L washers. Pickup existing anchor nuts in 4 places.
2. Install D2067 connector onto D2056 bellcrank assembly to locate hole for MS35489-9 grommet. With the mirror in the deployed position, mark and drill $\varnothing 0.125"$ (3.2mm) hole in landing light window panel where the grommet should be located. Open pilot hole to $\varnothing 0.563"$ (14.3mm). Install grommet.
3. Install D2053 bracket using AN526-1032R9 screws. Pickup on existing anchor nuts.
4. Position D2071 cable as shown. Install MS21919DG5 clamps using AN526-1032R9 screws where required. Pickup existing rivnuts or anchor nuts if available.
5. Install D2071 control cable using D2067 connector. Connector should rotate freely in bellcrank when MS21042-3 nut is torqued and cable clamped



**Figure 2: – View A: Looking Aft.
(D206-558-043 Mirror Shown)**

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31102

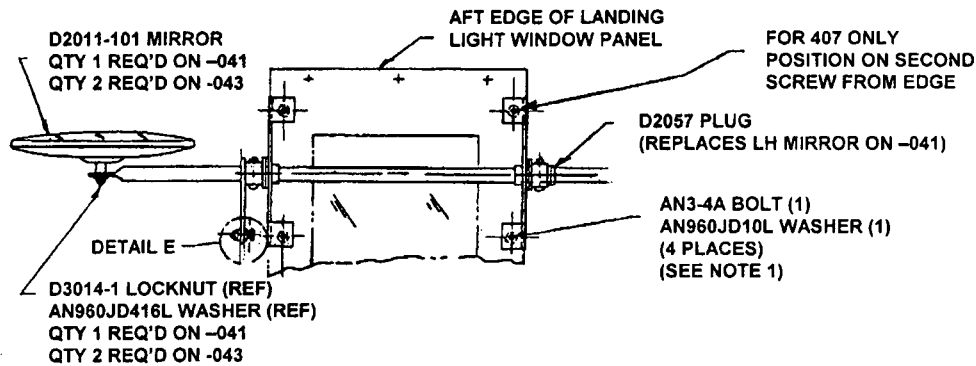


Figure 3: - View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)

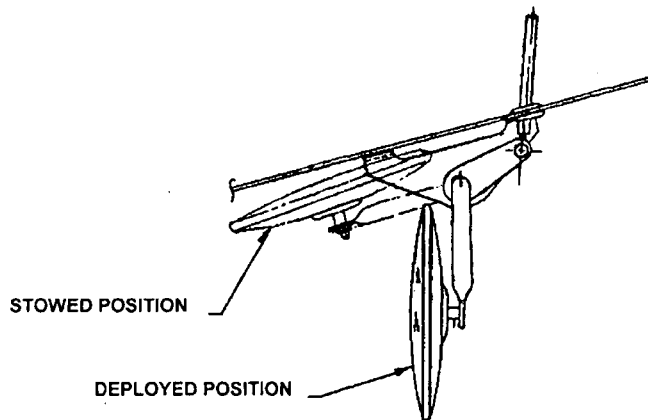


Figure 4: - Detail D: Looking from Side on Mirror Installation
(D206-558-041/-043 Mirror Shown)

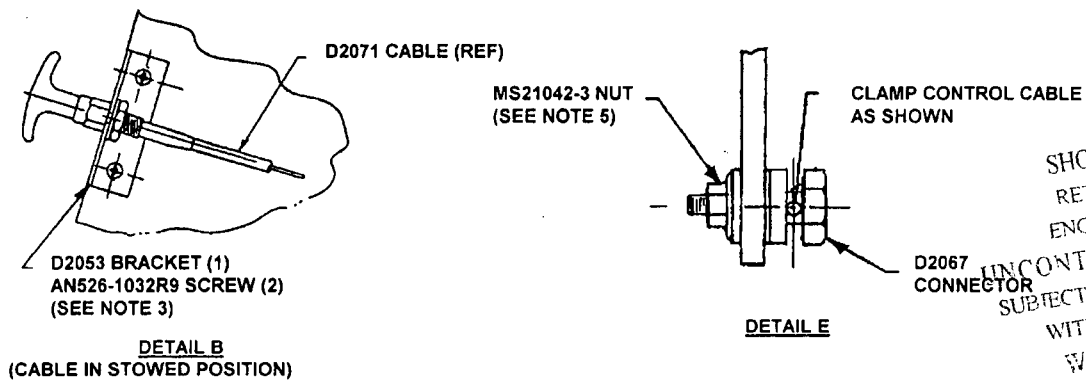


Figure 5: - Details B and E on Mirror Installation
(D206-558-041/-043 Mirror Shown)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31102

4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D206-558-041 Bell 206A/B/L/L1/L3/L4 Bell 407	2.4 lb 1.09 Kg	+5.0 in +0.13 m	+12.0 in-lb +0.14 m-Kg	+14.8 in +0.38 m	+35.5 in-lb +0.41 m-Kg
D206-558-043 Bell 206A/B/L/L1/L3/L4 Bell 407	3.0 lb 1.36 Kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-Kg	+14.8 in +0.38 m	+44.4 in-lb +0.52 m-Kg

5.0 WEIGHT AND BALANCE

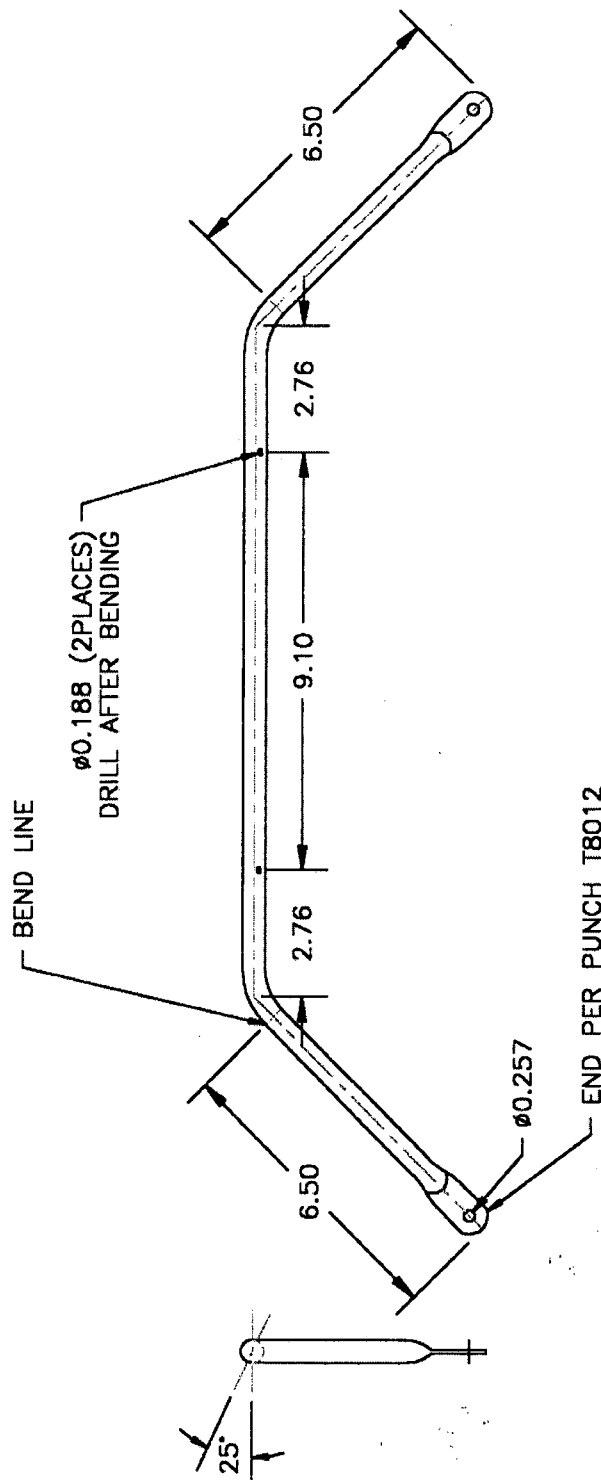
Qty -041	Qty -043	Part Number	Description
X		D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X	D206-558-043	DUAL CARGO MIRROR ASSEMBLY
1	2	D3014-1	* LOCKNUT
1	1	D2071	CABLE ASSEMBLY
2	2	D2054	BUSHING
1	1	D2067	CONNECTOR
	1	D2066	ARM
1		D2065	ARM
1		D2057	PLUG
1	1	D2056	BELLCRANK ASSEMBLY
1	1	D2055	CLAMP
1	1	D2053	BRACKET
2	2	D2052	BRACKET
1	2	D2011-101	MIRROR ASSEMBLY
4	4	AN3-4A	BOLT
4	4	AN526-1032R9	SCREW
1	2	AN960JD416L	* WASHER
4	4	AN960JD10	WASHER
6	6	AN960JD10L	WASHER
3	3	MS21042-3	NUT (or MS21042L3)
2	2	MS21919DG5	CLAMP
2	2	MS27039-1-18	SCREW
1	1	MS35489-9	GROMMET

* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31102



DESIGN	DRAWN BY	DART AEROSPACE LTD	
B WILLIAMS	B WILLIAMS	VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. B
<i>B.W.</i>	<i>[Signature]</i>	D2066	SHEET 1 OF 1
DATE	TITLE		SCALE
92.03.12	ARM		1:4
B	96.02.06	RE-DESIGNED	



D2066 CUT LENGTH 28.62
NOTE:
ADD D2052,D2055,D2056
D2054 TO ARM BEFORE
ENDS ARE PUNCHED AND
ARM IS BENT

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31102

MATERIAL: 304/316 SS 1/2 OD X 0.035 WALL